

What is claimed is:

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1. A semiconductor device comprising:
a semiconductor layer having at least a channel region
formed on an insulating surface;
a gate insulating film formed on said semiconductor layer;
a first conductive layer formed on said gate insulating film
wherein said first conductive layer extends over said channel
region; and
a second conductive layer formed on said first conductive
layer,
wherein said first conductive layer comprises tantalum and
said second layer comprises aluminum.
2. A semiconductor device according to claim 1, wherein
said gate insulating film comprises silicon oxide.
3. A semiconductor device according to claim 1, wherein
said semiconductor layer comprises polysilicon.
4. A semiconductor device according to claim 1, wherein
said first conductive layer is thinner than said second
conductive layer.

5. A semiconductor device according to claim 1, further comprising a pair of impurity regions in said semiconductor layer with said channel region interposed therebetween.

Sub 2
6. A semiconductor device comprising:
a semiconductor layer having at least a channel region formed on an insulating surface;
a gate insulating film formed on said semiconductor layer;
a first conductive layer formed on said gate insulating film wherein said first conductive layer extends over said channel region; and

a second conductive layer formed on said first conductive layer wherein said second conductive layer comprises a different material from said first conductive layer,

wherein each of said first and second conductive layers comprises a material selected from the group consisting of molybdenum, tantalum, aluminum, chromium, nickel, zirconium, titanium, palladium, silver, copper, and cobalt.

7. A semiconductor device according to claim 6, wherein said gate insulating film comprises silicon oxide.

8. A semiconductor device according to claim 6, wherein said semiconductor layer comprises polysilicon.

9. A semiconductor device according to claim 6, wherein said first conductive layer is thinner than said second conductive layer.

10. A semiconductor device according to claim 6, further comprising a pair of impurity regions in said semiconductor layer with said channel region interposed therebetween.

11. A semiconductor device comprising:
a semiconductor layer having at least a channel region formed on an insulating surface;
a gate insulating film formed on said semiconductor layer;
a first conductive layer formed on said gate insulating film wherein said first conductive layer extends over said channel region; and
a second conductive layer electrically connected to said first conductive layer,
wherein said first conductive layer comprises tantalum and said second layer comprises aluminum.

12. A semiconductor device according to claim 11, wherein said gate insulating film comprises silicon oxide.

13. A semiconductor device according to claim 11, wherein said semiconductor layer comprises polysilicon.

14. A semiconductor device according to claim 11, wherein said first conductive layer is thinner than said second conductive layer.

Sub DP 15. A semiconductor device according to claim 11, further comprising a pair of impurity regions in said semiconductor layer with said channel region interposed therebetween.

Sub DP 4 16. A semiconductor device comprising:
a semiconductor layer having at least a channel region formed on an insulating surface;
a gate insulating film formed on said semiconductor layer;
a first conductive layer formed on said gate insulating film wherein said first conductive layer extends over said channel region; and

a second conductive layer electrically connected to said first conductive layer wherein said second conductive layer comprises a different material from said first conductive layer, wherein each of said first and second conductive layers comprises a material selected from the group consisting of molybdenum, tantalum, aluminum, chromium, nickel, zirconium, titanium, palladium, silver, copper, and cobalt.

17. A semiconductor device according to claim 16, wherein said gate insulating film comprises silicon oxide.

18. A semiconductor device according to claim 16, wherein said semiconductor layer comprises polysilicon.

19. A semiconductor device according to claim 16, wherein said first conductive layer is thinner than said second conductive layer.

20. A semiconductor device according to claim 16, further comprising a pair of impurity regions in said semiconductor layer with said channel region interposed therebetween.